

THE MILKY DISEASE OF JAPANESE BEETLE LARVÆ

The Connecticut Agricultural Experiment Station, New Haven, Connecticut, has just published an interesting and important contribution by Raimon L. Beard, entitled "Studies on the Milky Disease of Japanese Beetle Larvæ" (Bulletin 491, August, 1945). In view of the wide distribution of spore dust in a dozen eastern states, by governmental agencies and private individuals and in view of the publicity given to this means of combatting the Japanese beetle, Doctor Beard's studies are significant because they throw much light on the host-parasite relationship, the biological aspects of which, had been largely ignored previously. Because the pathological effects of *Bacillus popillia* are obscure, Doctor Beard believes that greater consideration should be given to it as a bacterial parasite rather than as a disease.

After reading Doctor Beard's account, one has a much better picture than heretofore of the relationship between the Japanese beetle grub and the milky disease organism, such as the effects of the disease on larval mortality, on moulting and metamorphosis, on blood, etc.; on the susceptibility of the grubs; the potency of the spores; transmission; fate of spores in the soil; etc., and of the effect on a grub population. Doctor Beard's bulletin answers many questions, and of course, raises others. But it is a relief to have some of the answers and to have a better appreciation of what is happening and of what the milky disease is actually doing.—ED.